<u>REMARKS</u>

Claims 1-36 are pending and are rejected. Claims 1, 22, 25, and 28 are amended. Claims 3-4, 16-21, 23-24, 29, and 33-36 are canceled. Reconsideration and allowance of Claims 1-2, 5-15, 22, 25-28, and 30-32 are respectfully requested.

<u>Amendments to Specification</u>

Applicant amends the specification to correct clerical errors. No new matter is introduced.

<u>Claim Rejections under 35 USC §103 over Ohgane</u>

Claims 1-36 are rejected under 35 USC §103(a) as being obvious over Ohgane (USP 5,875,173).

Applicant has amended the claims, and discusses the patentability of the amended independent claims over the cited references individually below.

<u>Independent Claim 1</u>

Applicant's Claim 1 (as amended) recites:

A traffic management processor for processing an unspecified bit rate (UBR) traffic flow and a constant bit rate (CBR) traffic flow, comprising:

a departure time calculator (DTC) circuit for calculating a departure time for each packet received;

a content addressable memory (CAM) device coupled to the DTC circuit and having a plurality of rows, each row including a first portion for storing the departure time for a corresponding packet and including a second portion for storing a CBR bit indicating whether the corresponding packet belongs to the UBR traffic flow or to the CBR traffic flow, wherein an asserted CBR bit indicates the departure time corresponds to a packet of the CBR traffic flow, and a de-asserted CBR bit indicates the departure time corresponds to a packet of the UBR traffic flow; and

compare logic coupled to the CAM device and configured to determine which of the departure times selectively output from the CAM device is the earliest;

wherein the CAM device is configured to forward to the compare logic only the departure times having a de-asserted CBR bit so that only the departure times for packets belonging to the UBR traffic flow participate in determining which departure time is the earliest in the compare logic.

Ohgane fails to disclose or suggest the traffic management processor recited in Applicant's Claim 1.

First, as noted by the Office Action, Ohgane fails to disclose a CAM device that stores both a departure time and a CBR bit for each packet, "wherein an asserted CBR bit indicates the departure time corresponds to a packet of the CBR traffic flow, and a de-asserted CBR bit indicates the departure time corresponds to a packet of the UBR traffic flow," as recited in Claim 1.

Second, Ohgane does not disclose or suggest "compare logic coupled to the CAM device and configured to determine which of the departure times selectively output from the CAM device is the earliest," and also fails to disclose or suggest that "the CAM device is configured to forward to the compare logic only the departure times having a de-asserted CBR bit so that only the departure times for packets belonging to the UBR traffic flow participate in determining which departure time is the earliest in the compare logic," as recited in Applicant's Claim 1.

In contrast to Applicant's Claim 1, Ohgane teaches that *__all__* of the departure times stored in its CAM array 511 are compared with the current time value to select the earliest packet for departure. Ohgane fails to disclose or suggest that the departure times stored in CAM array 511 *are selectively forwarded to another compare circuit* to determine the earliest departure time. Indeed, the Office Action has not pointed to any language in Ohgane teaching that less than all of the departure times stored in its CAM array 511 are compared to determine which departure time is earliest. Thus, Ohgane fails to disclose or suggest a CAM device "configured to forward to the compare logic only the departure times having a de-asserted CBR bit so that only the departure times for packets belonging to the UBR traffic flow participate in determining which departure time is the earliest in the compare logic," as recited in Applicant's Claim 1.

Further, Ohgane does not disclose or suggest compare logic that is separate from and in addition to its CAM array 511, as recited in Applicant's Claim 1. Thus, while the processor of Claim 1 includes a *CAM device that* <u>*selectively outputs departure times*</u> *to a* <u>*separate compare logic*</u> *if the departure times are for UBR packets*, and then employs the separate compare logic to determine <u>*which of the selected packets output by the CAM device*</u> has the earliest departure time, **Ohgane's CAM device compares all the departure times** stored therein to determine the earliest departure time, irrespective of whether they belong to a CBR traffic flow or a UBR traffic flow.

Accordingly, Claim 1 is patentable over the cited references.

Claims 2 and 5-15 depend from Claim 1 and therefore distinguish over the cited references for at least the same reasons as Claim 1.

Claims 16-21

Claims 16-21 are canceled, and therefore their rejections are now moot.

Independent Claim 22

Applicant's Claim 22 (as amended) recites:

A traffic management processor for simultaneously processing an unspecified bit rate (UBR) traffic flow and a constant bit rate (CBR) traffic flow, comprising:

a departure time calculator (DTC) circuit configured to calculate a departure time for each UBR packet and configured to calculate a departure time window for each CBR packet;

a queuing mechanism coupled to the DTC circuit and configured to queue the UBR packets and the CBR packets together, and further configured to always enable the UBR packets for departure and to selectively enable the CBR packets for departure only if the CBR packet's departure time window comprises a current time value; and

compare logic coupled to the queuing mechanism and configured to compare the departure times for only the packets enabled by the queuing mechanism to select the packets for departure.

Ohgane fails to disclose or suggest the traffic management processor recited in Applicant's Claim 22.

First, as discussed above with respect to Claim 1, Ohgane does not disclose or suggest a queuing mechanism that "is configured to always enable the UBR packets for departure and to selectively enable the CBR packets for departure only if the CBR packet's departure time window comprises a current time value," as recited in Applicant's Claim 22.

Second, as discussed above with respect to Claim 1, Ohgane does not disclose or suggest "compare logic coupled to the queuing mechanism and configured to compare the departure times for only the packets enabled by the queuing mechanism to select the packets for departure," as recited in Applicant's Claim 22.

More specifically, in contrast to Applicant's Claim 22, Ohgane teaches that all of the departure times stored in its CAM array 511 are compared with the current time value to select the earliest packet for departure; Ohgane does not disclose or teach separate compare logic that compares *only the departure times that have been selectively enabled by the queuing mechanism*. Indeed, the Office Action has not pointed to any language in Ohgane that discloses or suggests that less than all of the departure times stored in its CAM array 511 are compared to determine which departure time is earliest.

Thus, Ohgane fails to disclose or suggest a traffic management processor including "a queuing mechanism coupled to the DTC circuit and configured to queue the UBR packets and the CBR packets together, and further configured to always enable the UBR packets for departure and to selectively enable the CBR packets for departure only if the CBR packet's departure time window comprises a current time value" and "compare logic coupled to the queuing mechanism and configured to compare the departure times for only the packets enabled by the queuing mechanism to select the packets for departure," as recited in Applicant's Claim 22.

Instead, Ohgane teaches a CAM device that compares *all* of the departure times stored therein to determine the earliest departure time, irrespective of whether they belong to a CBR traffic flow or a UBR traffic flow.

Accordingly, Applicant's Claim 22 is patentable over Ohgane.

Claims 25-27 depend from Claim 22 and therefore distinguish over the cited references for at least the same reasons as Claim 22.

Independent Claim 28

Applicant's Claim 28 (as amended) recites:

A method of processing a first traffic flow having an unspecified bit rate (UBR) and a second traffic flow having a constant bit rate (CBR), comprising:

calculating a departure time for each packet received;

storing the departure times for packets belonging to all traffic flows in the same table, each departure time having a CBR bit;

asserting the CBR bit for each packet that belongs to the CBR traffic flow;

de-asserting the CBR bit for each packet that belongs to the UBR traffic flow;

determining which of the departure times that have a de-asserted CBR bit is the earliest, wherein only the departure times having de-asserted CBR bits are compared with each other to determine which departure time is the earliest; and

transmitting the packet corresponding to the earliest departure time.

Ohgane fails to disclose or suggest the method recited in Applicant's Claim 28.

More specifically, as discussed above with respect to Claims 1 and 22, Ohgane teaches a CAM device that compares all of the departure times stored therein, irrespective of whether they belong to a CBR traffic flow or a UBR traffic flow, to determine the earliest departure time for packet forwarding selection. In contrast, Applicant's Claim 28 recites "determining which of the departure times that have a de-asserted CBR bit is the earliest, wherein only the departure times having de-asserted CBR bits are compared with each other to determine which departure time is the earliest."

Thus, because there is no language in Ohgane that discloses or suggests *comparing only certain departure times that have a de-asserted CBR* to determine which packet has the earliest departure time, Claim 28 is patentable over Ohgane.

Claims 30-32 depend from Claim 28 and therefore distinguish over the cited references for at least the same reasons as Claim 28.

Claims 33-36

Claims 33-36 are canceled and therefore their rejections are now moot.

CONCLUSION

In light of the above remarks, it is believed that Claims 1-2, 5-15, 22, 25-28, and 30-32 are in condition for allowance and, therefore, a Notice of Allowance of 1-2, 5-15, 22, 25-28, and 30-32 is respectfully requested. If the Examiner's next action is other than allowance as requested, the Examiner is requested to call the undersigned at (408) 236-6646.

Respectfully submitted,

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